

## Author Index to Volume 9

- Aboobucker, S., 307  
Akesson, N. B., 217, 231  
Al-Badry, M. S., 147  
Albrecht, R. M., 317  
Anderson, A. D., 171  
Anderson, J. P. E., 115, 259  
Anderson, R. L., 53, 329  
Aristila, A. V., 491  
Arunachalam, S., 307  
Aulerich, R. J., 627  
  
Bababunmi, E. A., 109  
Baker, T. A., 87  
Barker, R. J., 125  
Bassir, O., 109  
Baulu, P., 269  
Bergman, H. L., 171, 543, 557  
Bertoni, M. P., 569  
Binaghi, C., 569  
Bjerk, J. E., 743  
Bleavens, M. R., 627  
Boush, G. M., 247  
Bowling, J. W., 683  
Bowman, M. C., 483  
Boyer, M. G., 269  
Brake, J., 431  
Brausch, J., 599  
Brevik, E. M., 743  
Brooke, L. T., 699  
Browne, C., 181  
Buhler, D. R., 99  
Buikema, A. L., Jr., 607  
  
Cain, J. R., 9  
Cairns, T., 483  
Cajina-Quezada, M., 591  
Call, D. J., 699  
Castelli, M. G., 569  
Chandra, S. V., 79, 383  
Chiabrando, C., 569  
Cronartie, E., 461  
Crosby, D. G., 135  
Culver, W. H., 281  
  
Dalela, R. C., 451  
Davies, D. B., 637  
DeFoe, D. L., 53  
DeFouw, C., 651  
DeGraeve, G. M., 171, 543, 557  
Dickins, M., 579  
Djuangshi, N., 437  
Domsch, K. H., 115, 259  
Dubey, M. P., 383  
Dumont, J. N., 23, 181, 591  
  
Fanelli, R., 569  
Farrer, D. S., 171  
  
Fiandt, J. T., 53, 329  
Finley, M. T., 461  
Fishbein, L., 483  
Fowle, C. D., 269  
Fredrickson, A. S., 217, 231  
Freeman, S. R., 23  
  
Gangoli, S. D., 473  
Garattini, S., 569  
Geiger, D. L., 557  
Geller, A., 289  
Giesy, J. P., 683  
Gilani, S. H., 17  
Gilbert, P., 533  
Gilchrist, K. W., 317  
Giles, J. W., 135  
Guiney, P. D., 579, 667  
Gupta, S. K., 79  
  
Hacker, C. S., 65  
Haseltine, S. D., 461  
Hayden, C. M., 9  
Hayes, R. H., 193  
Hattula, M.-J., 491  
Heidker, J. C., 87  
Hester, P. Y., 431  
Hietanen, E., 337  
Holub, B. J., 637  
Honig, R. A., 607  
Hughes, D. L., 661  
Hughes, D. N., 269  
Hulse, M., 65  
Hyodo, K., 437  
  
Jackson, T., 217, 231  
Jeyalakshimi, K., 307  
  
Kania, H. J., 683  
Kilpiö, J., 337  
Klemmer, H. W., 715  
Knaak, J. B., 217, 231  
Knowles, C. O., 147  
Korsak, R. J., 715  
Kunzmann, M. R., 125  
  
Lal, R., 163  
Lebsack, M. E., 171  
Lehner, Y., 125  
Lin, L. I., 349  
Lindenbaum, A., 619  
Lu, Po-Yung, 699  
  
Maddy, K. T., 217, 231  
Mahoney, J. S., 65  
Marano, M., 17  
Marathe, M. R., 473  
Marazza, V., 569  
Martelli, G. P., 569  
  
Matsumura, F., 247  
Mazmudar, R. M., 473  
Mercier, M., 533  
Metcalfe, C. D., 507  
Meyer, J. S., 557  
Miller, C. S., 281  
Moretti, E. S., 619  
Morgan, G. W., 431  
Morgan, D. P., 349  
Mori, T., 415, 519  
  
McFarland, V. A., 733  
McLane, M. A. R., 661  
McLeese, D., 1, 507, 675  
  
Närhi, M., 337  
Noseda, A., 569  
  
Oberg, S. G., 393  
Oehme, F. W., 193  
Oller, W. L., 483  
Olorunsogo, O. O., 109  
Olson, K. L., 247  
Overcast, R. L., 543  
  
Papst, M. H., 269  
Pardini, R. S., 87  
Parker, R. D. R., 393  
Paschal, D. C., 9  
Payne, B., 87  
Peddicord, R. K., 733  
Penmarthy, L., 193  
Peterson, R. E., 317, 579, 667  
  
Pezza, F., 569  
Pezzack, D., 1, 507, 675  
Pfäffli, P., 727  
Phillips, G. R., 99  
Pickering, Q. H., 405  
Pier, S. M., 65  
Poncelet, F., 533  
  
Quadros, F., 473  
  
Rani, S., 451  
Rao, R. R., 473  
Rashad, N. M., 715  
Ray, S., 1, 675  
Rees, G. A. V., 269  
Reichert, E. L., 715  
Ringer, R. K., 627  
Rivera, L., 231  
Roos, A., 491  
  
Saikaly, H. H., 349  
Saint-Ruf, G., 533  
Sastry, K. V., 425  
Sato, M. M., 715  
Savolainen, H., 337, 727

- Saxena, D. M., 163  
Schoor, W. P., 599  
Schroeder, G. D., 65  
Schultz, T. W., 23, 591  
Seefeld, M. D., 317  
Sharma, K., 425  
Sharma, R. P., 393  
Shukla, G. S., 79, 383  
Sikes, C. V., 431  
Soemarwoto, O., 437  
Sorensen, E. M., 619  
Spehar, R. L., 53
- Srivastava, R. S., 79  
Sugatt, R. H., 41, 207  
Suzuki, K. T., 415, 519  
Suzuki, S., 437
- Thaxton, P., 431
- Vainio, H. 337  
Verma, S. R., 451  
Virtanen, M. T., 491
- Waiwood, B. A., 675  
Walbridge, C. T., 329  
Ware, G. W., 135  
Weaver, C. M., 651  
Wong, L., 715
- Yamamura, M., 415, 519
- Zabik, M. E., 651

## Subject Index to Volume 9

- Abate®, *See* Temephos  
Acarol®, *See* Bromopropylate  
Acetylcholinesterase  
activity in shrimp, inhibition by methyl parathion and its oxon, 599  
and dietary diazinon in the rat, 637  
Acridine  
toxicity of, to *Tetrahymena*, 594  
Alfalfa  
honey bees and dimethoate contamination, 125  
Algae  
accumulation of cadmium in, 9  
effects of an artificial refinery mixture on, 613  
Aminocarb  
effects of, on mitochondrial transport systems, 87  
Ammonia  
effects of, on *Daphnia* and fish, 548  
Aquatic Insects  
survival of, exposed to cadmium, copper, lead, and zinc, 329  
Arsenic  
effects of compounds on fish and invertebrates, 53  
*o*-Arsenic acid  
exposure of workers to, 281  
Atrazine  
degradation of, by bacteria, 289  
Azinphosmethyl  
effect of, on diallate-triallate degradation, 115  
Bacteria  
degradation of atrazine by, 289  
Baygon,® *See* propoxur  
Beef  
polybrominated biphenyls in raw and cooked, 651  
Bentazon  
effect of, on diallate-triallate degradation, 115  
*p*-benzoquinone  
toxicity of, to fish, 562  
Birds  
Cadmium in, 65  
lead in, 65  
manganese in, 65  
Bromopropylate  
effects of, on mitochondrial transport systems, 87  
Buffalo  
effects of monocrotophos on, 473  
Cadmium  
accumulation of, in worms, 1  
accumulation of, in algae, 9  
in birds, 65  
in healthy swine, cattle, dogs, and horses, 193  
survival of aquatic insects exposed to binding proteins in worms, 329, 415, 519  
in Java rice, 437  
in shrimp, 675  
in crayfish, 683  
Carbaryl  
effects of, on mitochondrial transport systems, 87  
effects of, on catfish, 307  
Carbazole  
toxicity of, to *Tetrahymena*, 594  
Carbofuran  
effects of, on mitochondrial transport systems, 87  
Cat  
2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573  
Catechol  
toxicity of, to fish, 561  
Cattle  
lead, cadmium, and mercury in healthy, 193  
effects of monocrotophos on, 473  
2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573  
Chelation therapy for lead in mice, 619  
Chickens  
nickel poisoning in, 17  
mercury toxicity in, 431  
effects of monocrotophos in, 473  
2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573  
Chlorobenzaldehyde  
from DDA, 135  
Chlorobenzilate  
effects of, on mitochondrial transport systems, 87  
Chloropropylate  
effects of, on mitochondrial transport systems, 87  
Chlorocholinchloride  
effect of, on diallate-triallate degradation, 115  
*p*-Chlorophenol  
effects of, on mitochondrial transport systems, 87  
from DDA, 135  
Cholinchloride  
effect of, on diallate-triallate degradation, 115  
Chlorpyrifos  
effect of, on diallate-triallate degradation, 115  
persistence in ponds, 269  
Chlorpyrifos methyl  
persistence of, in ponds, 269  
Chromium  
toxicity of, to the fathead minnow, 405  
Clam  
effect of kaolinite on, 736

- Clay**  
lethality of, to marine and estuarine macrofauna, 733
- Cobaltous chloride**  
treatment on 2-methylnaphthalene disposition and hepatic cytochrome P-450 content in carp, 579
- Copper**  
effects of, on mice, 79  
survival of aquatic insects exposed to, 329  
in Java rice, 437
- Cotton**  
degradation of monocrotophos on leaves, 480
- Crab**  
DDE, PCBs, and hexachlorobenzene in, 743  
pentachlorobenzene in, 747
- Crayfish**  
Cadmium and Zinc in, 683
- m-cresol**  
toxicity of, to *Daphnia* and fish, 562
- o-cresol**  
toxicity of, to *Daphnia* and fish, 562
- p-cresol**  
toxicity of, to *Daphnia* and fish, 561
- Daphnia**  
selenium in, 23  
toxicity of coal condenser water to, 543  
effects of ammonia on, 548  
effects on phenols on, 548, 557
- Di-allate**  
microbial degradation of, 115  
degradation of, in soil, 259
- Diazinon**  
toxicology of dietary, in rat, 637
- Dichlorobenzophenone**  
effects of, on mitochondrial transport systems, 87  
from DDA, 135
- DDA**  
effects of, on mitochondrial transport systems, 87  
photo decomposition of, 135
- DDE**  
effects of, on mitochondrial transport systems, 87  
in fish and invertebrates, 743
- DDT**  
effects of, on mitochondrial transport systems, 87  
effect of, on cell growth, 163  
model ecosystem with, 491
- 2,4-D**  
effect of, on diallate-triallate degradation, 115
- Dichlorprop**  
effect of, on diallate-triallate degradation, 115
- Dicofol**  
effects of, on mitochondrial transport systems, 87
- Diethylenetriaminepentraacetate**  
to remove lead from mice, 619
- Dihydroxynaphthalene**  
effects of, on mitochondrial transport systems, 87
- Dimethoate**  
effect of, on diallate-triallate degradation, 115  
and honey bee contamination, 125
- 1,2-Dimethyl indole**  
toxicity of, to *Tetrahymena*, 594
- 2,6-Dimethyl pyridine**  
toxicity of, to *Tetrahymena*, 594
- 2,6-Dimethyl quinoline**  
toxicity of, to *Tetrahymena*, 594
- Dimetilan**  
effects of, on mitochondrial transport systems, 87
- Dinitrophenol**  
effects of, on fish, 451
- Dinoseb acetate**  
effect of, on diallate-triallate degradation, 115
- Dogs**  
lead, cadmium, and mercury in health, 193
- Donkey**  
2,3,7,8-tetrachlorodibenzo-p-dioxin in, 573
- Ducks**  
effects of toxaphene in, 461  
2,3,7,8-tetrachlorodibenzo-p-dioxin in, 573
- Dursban®. See Chlorpyrifos**
- Ethylenediaminetetraacetate**  
to remove lead from mice, 619
- Ferrets**  
effects of PCBs on, 627
- Fish**  
effects of sodium, dichromate on, 41, 207  
effects of arsenic compounds on, 53  
mercury in, 99  
toxicity of oil shale process water to, 171  
toxic effects of carbaryl on, 307  
toxicity of chromium to, 405  
effects of mercuric chloride on, 425  
effects of phenol and dinitrophenol in, 451  
toxicity of coal condenser water to, 543  
toxicity of ammonia to, 548  
toxicity of phenols to, 548, 557, 699  
disposition of 2-methylnaphthalene in, 579  
effects of PCBs on, 667  
effect of kaolinite on, 739  
DDE in, 743  
PCBs in, 743  
pentachlorobenzene, hexachlorobenzene, and octachlorostyrene in, 743
- Furadan®**  
*See* carbofuran
- Genetic effects of chlorinated anilines and azobenzenes on *S. typhimurium***, 533
- Goat**  
2,3,7,8-tetrachlorodibenzo-p-dioxin in, 573

- Grass**  
degradation of monocrotophos on, 480
- Guinea pig**  
2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573
- Hazardous chemicals**  
proposed toxicological index, 483
- n-Heptane**  
neurochemical effects of, on rats, 727
- Hexachlorobenzene**  
in fish and invertebrates, 743
- Honey bees**  
and dimethoate contamination, 125
- Horses**  
lead, cadmium, and mercury in healthy, 193  
2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573
- Housefly**  
phthalate-organophosphate interactions in the, 147
- Hydroquinone**  
toxicity of, to *Daphnia* and fish, 562
- Indole**  
toxicity of, to *Tetrahymena*, 594
- Invertebrates**  
effects of arsenic compounds on, 53
- Iron**  
effects of, on mice, 79
- Isopods**  
effect of kaolinite on, 736
- Kaolinite**  
lethality of, on marine and estuarine macrofauna, 733
- Kelthane®**, *See* Dicofol
- Lead**  
in birds, 65  
in healthy swine, cattle, dogs, and horses, 193  
survival of aquatic insects exposed to, 329  
effects of, on rabbits, 337  
chelation therapy for, in mice, 619
- Leptophos**  
effects of, on mitochondrial transport systems, 87
- Manganese**  
in birds, 65  
effects of, in mice, 79  
effects of, in rats, 383
- Matacil®**, *See* aminocarb
- Mercuric chloride**  
effects of, on brain enzymes of fish, 425
- Mercury**  
accumulation in rainbow trout, 99  
in healthy swine, cattle, dogs, and horses, 193  
effects of, on chickens, 431
- Methylnaphthalene**  
effects of  $\text{CoCl}_2$  on removal of, from carp, 579
- Methyl paraoxon**  
inhibition of acetylcholinesterase activity by, in shrimp, 599
- Methyl parathion**  
inhibition of acetylcholinesterase activity by, in shrimp, 599
- 3-Methyl pyridine**  
toxicity of, to *Tetrahymena*, 594
- 2-Methyl quinoline**  
toxicity of, to *Tetrahymena*, 594
- Mexacarbate**  
effects of, on mitochondrial transport systems, 87
- Mice**  
effects of metals on, 79  
effects of Vanadium on, 393  
chelation therapy for lead in, 619
- Mink**  
effects of PCBs on, 627
- Mitochondrial electron transport**  
effects of pesticides on, 87  
effects of N-(phosphonomethyl)glycine on, 109
- Monocrotophos**  
effects of, to cattle, chickens, buffaloes, and human volunteers, 473  
degradation of, in cotton and grass, 478  
degradation of, in soil and water, 479
- Mussel**  
effect of kaolinite on, 736  
DDE, PCBs, and hexachlorobenzene in, 743  
pentachlorobenzene in, 747
- l-Naphthol**  
effects of, on mitochondrial transport systems, 87
- Nickel**  
poisoning in chick embryos, 17
- p-Nitrophenol**  
effects of, on fish, 699
- Nuvacron®**, *See* monocrotophos
- Octachlorostyrene**  
in fish and invertebrates, 743
- Oil shale process water**  
toxicity of, to trout and minnows, 171
- Organochlorine compounds in aquatic environments**, 743
- Owls**  
effects of PCBs on, 661
- PCBs** *See* polychlorobiphenyls
- Pentachlorobenzene**  
in fish and invertebrates, 743
- Pentachlorophenol**  
effects of, to exposed workers, 715
- Pesticide workers**  
Safety effectiveness of pesticide equipment, 217, 231  
exposure of, to arsenic acid, 281  
occupationally exposed to pesticides, 349  
exposed to monocrotophos, 473  
exposed to pentachlorophenol, 715

- Pheasant**  
2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573
- Phenol**  
effects of, on fish, 451, 543, 557, 699  
effects of, on *Daphnia*, 548, 557
- N-(phosphonomethyl)glycine**  
interaction of, with corn shoot enzymes, 109
- Phosvel\***, *See Leptophos*
- Phthalates**  
toxicity of, to house flies, 147
- Phthalate-organophosphate interactions in the house fly**, 147
- Polybrominated biphenyls**  
in raw and cooked beef, 651
- Polychlorobiphenyls**  
uptake of, by worms and shrimp, 507  
effects of, on ferrets and mink, 627  
effects of, on owls, 661  
in yellow perch and trout, 667  
in fish and invertebrates, 743
- Propoxur**  
effects of, on mitochondrial transport systems, 87
- Pyrazon**  
effect of, on diallate-triallate degradation, 115
- Pyridine**  
toxicity of, to *Tetrahymena*, 594
- Pyrrole**  
toxicity of, to *Tetrahymena*, 594
- Quinoline**  
toxicity of, to *Tetrahymena*, 594
- Rabbits**  
tests for 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 317  
effects of lead on, 337  
toxic effects of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 569
- Rats**  
behavioral effects of toxaphene and toxic components A and B on, 247  
tests for 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 317  
effects of manganese on, 383  
cadmium-binding proteins in, 519  
genetic effects of anilines and azobenzenes on, 533  
toxicity of dietary diazinon in, 637  
effects of n-heptane on, 727
- Refinery effluent standards**, 607
- Reidan\***, *See Chlorpyrifos methyl*
- Resorcinol**  
toxicity of, to *Daphnia* and fish, 561
- Rice**  
cadmium, copper, and zinc in, produced in Java, 437
- Salmonella typhimurium**  
genetic effects of anilines and azobenzenes on, 533
- Sea urchin**  
effect of kaolinite on, 736
- Seawater**  
uptake of cadmium by worms from, 1
- Sediment**  
uptake of cadmium by worms from, 1  
uptake of PCBs from, by worms and shrimp, 507  
lethality of, to marine and estuarine macrofauna, 733
- DDE, PCBs, and hexachlorobenzene in, 743**
- octachlorostyrene in, 746**
- pentachlorobenzene in, 747**
- Selenium**  
in *Daphnia*, 23  
effects of sodium selenite on tadpoles, 181
- Shrimp**  
uptake of PCBs by, 507  
inhibition of acetylcholinesterase by methyl parathion and its oxon, 599
- cadmium and zinc in, 675**
- effect of kaolinite on, 733**
- DDE, PCBs, and hexachlorobenzene in, 743**
- Snail**  
effect of kaolinite on, 736
- pentachlorobenzene in, 747**
- Sodium dichromate**  
effects of, on Coho salmon, 41, 207
- Soil**  
degradation of monocrotophos in, 479  
2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 570
- Swine**  
lead, cadmium, and mercury in healthy, 193
- Tadpoles**  
effects of sodium selenite on, 181
- Temephos**  
persistence of, in ponds, 269
- 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin**  
tests for, in rats and rabbits, 317
- genetic effects of, 533**
- toxic effects of, in animals, 569**
- in soil, 570**
- Tetrahymena pyriformis**  
effects of nitrogenous heterocyclic compounds on, 591
- Thiophanate**  
effect of, on diallate-triallate degradation, 115
- Toxaphene**  
behavioral effects of, on rats, 247  
effects of, in ducks, 461
- Toxicity of coal gasification condenser water on aquatic biota**, 543
- Toxicity of phenolic compounds to aquatic biota**, 557
- to fat head minnows, 699**
- Toxicity-structure relationships of nitrogenous heterocyclic compounds**, 591

- Toxicological risk assessment procedure:  
proposal, 483
- Tri-allate  
microbial degradation of, 115  
degradation of, in soil, 259
- TDE  
effects of, on mitochondrial transport systems, 87
- 2,4,5-Trichlorophenol  
effects of, on fish, 699
- 2,4,5-T  
effect of, on diallate-triallate degradation, 115
- Tridemorph  
effect of, on diallate-triallate degradation, 115
- Tunicates  
effect of kaolinite on, 736
- Vanadium  
effects of, on mice, 393
- Water  
degradation of monocrotophos in, 479  
toxicity of coal gasification condenser, to aquatic biota, 543
- Worms  
cadmium in, 1  
cadmium-binding proteins in, 415, 519  
uptake of PCBs by, 507  
DDE, PCBs, and hexachlorobenzene in, 743
- Zectran®, *See* Mexacarbate
- Zinc  
survival of aquatic insects exposed to, 329  
in Java rice, 437  
in shrimp, 675  
in crayfish, 683